

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-2. (canceled)

3. (currently amended) A ~~material-film~~ production method of containing-fullerene or containing-nanotube material film, ~~characterized in that~~ the method comprises:

generating plasma including containment target ions and collision ions having the same polarity as said containment target ions;

irradiating said plasma toward a deposition-assistance substrate[[]] on which fullerene or nanotube are deposited, by applying a bias voltage of a polarity opposite to that of said containment target ions to said deposition-assistance substrate, to thereby provide said containment target ions and said collision ions with acceleration energies, respectively; and

colliding said collision ions with ~~material-molecules~~ constituting a material-film fullerene molecules or nanotube molecules, to thereby cause said ~~material-molecules~~ fullerene molecules or nanotube molecules to internally contain said containment target ions, respectively.

4. (currently amended) The ~~material-film~~ production ~~apparatus~~ method of claim [[1]] 3, ~~characterized in that the method~~ further ~~comprises~~ comprising:

depositing said ~~material-film~~ fullerene molecules or nanotube molecules on said deposition-assistance substrate, simultaneously with the irradiation of said plasma toward said deposition-assistance substrate.

5. (currently amended) The ~~material-film~~ production method of claim [[1]] 3, ~~characterized in that the method~~ further ~~comprises~~ comprising:

irradiating said plasma onto said ~~material-film~~ fullerene molecules or nanotube molecules previously deposited on said deposition-assistance substrate.

6. (currently amended) A ~~material-film~~ production method of containing-fullerene or containing-nanotube material film, ~~characterized in that the method~~ ~~comprises~~ comprising:

generating plasma including collision ions;

irradiating said plasma toward ~~a material-film~~ fullerene or nanotube previously deposited on ~~said a~~ a deposition-assistance substrate;

simultaneously therewith, shooting vapor comprising containment target molecules toward said ~~material-film~~ fullerene or nanotube;

colliding said collision ions with ~~material molecules~~ constituting the material film; and

~~simultaneously therewith, causing said material~~
~~molecules~~ fullerene molecules or nanotube molecules, to thereby
cause fullerene molecules or nanotube molecules to internally
contain said containment target molecules, ~~respectively~~.

7. (currently amended) The ~~material-film~~ production
method of claim [[1]] 6, ~~characterized in that the method~~ further
~~comprises~~ comprising:

transporting said generated plasma by a magnetic field
to thereby irradiate said plasma toward said deposition-
assistance substrate.

8. (canceled)

9. (currently amended) The ~~material-film~~ production
method of claim [[1]] 3, ~~characterized in that~~ wherein said
implantation target ions or said containment target ions are
alkali metal ions, nitrogen ions, or halogen ions.

10. (currently amended) The ~~material-film~~ production
method of claim 6, ~~characterized in that~~ wherein said containment
target substance is TTF, TDAE, TMTSF, pentacene, tetracene,
anthracene, TCNQ, Alq₃, or F₄TCNQ.

11. (currently amended) The ~~material-film~~ production
method of claim 3, ~~characterized in that~~ wherein said collision
ions each have a diameter of ~~3.0~~ 3.0 Å or larger.

12. (currently amended) The ~~material-film~~ production
method of claim 11, ~~characterized in that~~ wherein said collision

ions are fullerene positive ions or fullerene negative ions, respectively.

13. (currently amended) A ~~material film~~ production apparatus of containing-fullerene or containing-nanotube comprising:

a vacuum vessel;

~~magnetic field generation means;~~

plasma generation means for generating plasma including implantation target ions and collision ions having the same polarity as said containment target ions;

~~an electric potential body configured to control a density of said implantation target ions by applying a control voltage to said electric potential body;~~

a deposition-assistance substrate for depositing ~~a material film~~ fullerene or nanotube thereon;

magnetic field generation means for transporting and irradiating said plasma to said deposition-assistance substrate;

and

a bias power supply configured to apply a bias voltage to said deposition-assistance substrate.

14. (currently amended) The ~~material film~~ production apparatus of claim 13, ~~characterized in that~~ wherein said electric potential body comprises electroconductive wires in a lattice pattern.

15. (currently amended) A ~~material-film~~ production apparatus of containing-fullerene or containing-nanotube comprising:

a vacuum vessel;

~~magnetic field generation means;~~

plasma generation means for generating plasma including containment target ions;

collision ion generation means for generating collision ions;

a deposition-assistance substrate for depositing ~~a material-film~~ fullerene or nanotube thereon;

magnetic field generation means for transporting and irradiating said plasma to said deposition-assistance substrate;
and

a bias power supply configured to apply a bias voltage to said deposition-assistance substrate.

16. (currently amended) A ~~material-film~~ production apparatus of containing-fullerene or containing-nanotube comprising:

a vacuum vessel;

~~magnetic field generation means;~~

plasma generation means for generating plasma including collision ions;

a deposition-assistance substrate for depositing ~~a material-film~~ fullerene or nanotube thereon;

magnetic field generation means for transporting and
irradiating said plasma to said deposition-assistance substrate;

containment target molecule shooting means for shooting
vapor including containment target molecules to said deposition-
assistance substrate; and

a bias power supply configured to apply a bias voltage
to said deposition-assistance substrate.

17. (new) The production method of claim 3, further
comprising:

measuring an electric current flowing between the
deposition-assistance substrate and a bias power supply for
applying the bias voltage thereto, to thereby measure the density
of the containment target ions.